UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/546,137	08/19/2005	David A. Blaker	026032-4947	1344

22428   7590   07/21/2009
FOLEY AND LARDNER LLP
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER
BROWN, VERNAL U

ART UNIT	PAPER NUMBER
2612	

MAIL DATE	DELIVERY MODE
07/21/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 May 2009</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-23 and 25-29</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-23,25-29</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

This action is responsive to communication filed on May 8, 2009.

Response to Amendment

The examiner has acknowledged the amendment of claims 1, 8, 10, 16, 18, 25-29 and the cancellation of claim 24.

Response to Arguments

Applicant's arguments filed 4/27/09 have been fully considered but they are not persuasive.

Applicant argues on pages 7-8 that the reference of Dykema is silent on teaching identifying the device type based on a characteristic of the control signal and determining at least one RF frequency associated with the RF control signal based on the determined device type. It is the examiner's position that the reference of Dykema et al. teaches identifying a device type as a GENIE device type based on the number of rising edges detected in 850μs time period (col. 20 lines 49-56). Dykema et al also teaches the frequency of the RF control signal is based on the type of device identified and there is a frequency associated with identified device type (col. 20 lines 55-64).

Applicant's arguments with respect to the teaching of combination of the references of Roddy and Tsui for the rejection of claims 1-3, 5, 8-11, 13-14 and 25-26 have been considered but are moot in view of the new ground(s) of rejection for these claims. The reference of Roddy is now only relied upon for teaching a wideband receiver (30) coupled to the antenna for receiving a control signal from a remote transmitter (col. 2 lines 41-50)..

Regarding applicant argument on pages 13-15 regarding the combination of the reference

of Dykema and Rodney, the reference of Dykema et al. teaches identifying a device type as a

GENIE device type based on the number of rising edges detected in 850μs time period (col. 20

lines 49-56). Dykema et al also teaches the frequency of the RF control signal is based on the

type of device identified and there is a frequency associated with identified device type (col. 20

lines 55-64). The reference of Roddy is now only relied upon for teaching a wideband receiver

(30) coupled to the antenna for receiving a control signal from a remote transmitter (col. 2 lines

41-50).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-22, and 27-28 are rejected under 35 U.S.C. 102(b) as being anticipated by

Dykema et al. US Patent 5854593.

Regarding claim 18, Dykema et al. teaches initiating a training sequence (col. 4 lines 27-

32);

identifying and storing a control code of the RF control signal (col. 6 lines 14-20, col. 17 lines
15-20) ;

  identifying the data characteristic of the RF control signal (col. 18 lines 15-20) and
identifying a frequency based on a data characteristic of the number of rising edges appearing in
the received signal over a period of a predetermined time interval (col. 17 lines 1-14). Dykema
et al. teaches identifying a device type (manufacturer) based on a data characteristic such as the
number of rising edges in a define period of time (col. 20 lines 42-67). Dykema et al. also
teaches identifying the RF frequency associated with the control signal based on the determined
device type (col. 20 lines 55-67).

  Regarding claim 19, Dykema et al. teaches the control circuit stores a radio frequency
(col. 17 lines 15-20).

  Regarding claim 20, Dykema et al. teaches initiating the training sequence with the
actuation of a switch (col. 16 lines 32-47).

  Regarding claim 21, Dykema et al. teaches the training sequence is initiated when a
signal is received by the transceiver (col. 19 lines 49-55).

  Regarding claim 22, Dykema et al. teaches the transceiver is mounted in a vehicle (col. 5
lines 41-49) and teaches using a display device connected to a vehicle bus to inform the user to
initiate a training sequence (col. 6 lines 60-67).

  Regarding claims 27-28, Dykema et al. teaches determining the RF frequency associated
with the control signal comprising selecting the list of frequencies from a pre-stored list of
frequencies (col. 20 lines 50-67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 1-6, 8-12, 16-17,and 29 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Dykema et al. US Patent 5854593 in view of Roddy et al. US Patent 6078271.

Regarding claim 1, 8, 10, Dykema et al. teaches a trainable transceiver comprising:

an antenna coupled to a receiver for receiving RF control signals (col. lines 36-38)and the

RF control signal includes a control code, a set of data characteristic and a RF carrier frequency

(col. 6 lines 5-27);

a control circuit (57) coupled to the receiver and having a training mode in which the

control circuit is configured to identify a data characteristic of the control signal (col. 6 lines 16-

25) and to identify a device type (make) based on a data characteristic such as the number of

rising edges in a define period of time (col. 20 lines 42-67). Dykema et al. also teaches

identifying the RF frequency associated with the control signal based on the determined device

type (col. 20 lines 55-67). Dykema et al. is silent on teaching the receiver is a wideband receiver.

Roddy et al. in an analogous art teaches a wideband receiver (30) coupled to the antenna for

receiving a control signal from a remote transmitter (col. 2 lines 41-50).

It would have been obvious to one of ordinary skill in the art to modify the system of Dykema et al. to include a wideband receiver as disclosed by Roddy et al. because this allows the transceiver to learn control codes that utilizes a wide range of frequencies and allows the single transceiver to control multiple devices of different manufacturer.

Regarding claim 2, Dykema et al. teaches the control circuit is configured to store a RF frequency (col. 6 lines 14-15).

Regarding claims 3, 11, Dykema et al. teaches the controller determining a fixed code (col. 15 lines 25-27).

Regarding claim 4, 12, Dykema et al. teaches the control code is an encrypted rolling code and the controller identify an encryption algorithm base on the data characteristic (col. 25 lines 48-55).

Regarding claims 5-6, 9, 13-14, Dykema et al. teaches the control circuit retrieved the control code and at least one RF frequency and generate a control code including the control code and RF frequency (col. 6 lines 5-20).

Regarding claims 16-17, Dykema et al. teaches a plurality of frequencies are based on the device type and the control circuit generate at each of the plurality of frequencies (col. 20 lines 55-67).

Regarding claims 25-26, Dykema et al. teaches determining the RF frequency associated with the control signal comprising selecting the list of frequencies from a pre-stored list of frequencies (col. 20 lines 50-67).

Regarding claim 29, Dykema et al. teaches initiating a training sequence (col. 4 lines 27-32);

identifying and storing a control code of the RF control signal ((col. 6 lines 14-20, col. 17 lines 15-20) ;

identifying the data characteristic of the RF control signal (col. 18 lines 15-20) and identifying a frequency based on a data characteristic of the number of rising edges appearing in the received signal over a period of a predetermined time interval (col. 17 lines 1-14);

identifying a manufacturer based on the data characteristic (col. 20 lines 50-67, col. 25 lines 41-65). Dykema et al. is silent on teaching a wideband receiver coupled to the antenna. Roddy et al. in an analogous art teaches the use of a wideband receiver (col. 2 lines 41-50);

It would have been obvious to one of ordinary skill in the art to modify the system of Dykema et al. as disclosed by Roddy et al. because the wideband receiver allows the transceiver to detect and emulate control signals of a wide range of frequencies.

Claims 7, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dykema et al. US Patent 5854593 in view of Roddy et al. US Patent 6078271 and further in view of Tsui US Patent 6556813.

Regarding claims 7,15, Dykema et al. teaches the tuning of the receiver (col. 7 lines 29-33) but is silent on teaching a wideband receiver. Tsui in an analogous art teaches a wideband receiver and the receiver is tuned to a desired frequency (col. 4 lines 34-48).

It would have been obvious to one of ordinary skill in the art to modify the system of

Dykema et al. as disclosed by Tsui because a tuned receiver provides a more versatile receiver

and allows for the detection of a wide range of frequencies.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dykema et al.

US Patent 5854593 in view of Tsui US Patent 6556813.

Regarding claim 23, Dykema et al. teaches the tuning of the receiver (col. 7 lines 29-33)

but is silent on teaching a wideband receiver. Tsui in an analogous art teaches a wideband

receiver and the receiver is tuned to a desired frequency (col. 4 lines 34-48).

It would have been obvious to one of ordinary skill in the art to modify the system of

Dykema et al. as disclosed by Tsui because a tuned receiver provides a more versatile receiver

and allows for the detection of a wide range of frequencies.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VERNAL U. BROWN whose telephone number is (571)272-3060. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on 571-272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vernal U Brown/

Examiner, Art Unit 2612